Dimethyl tetrathiooxalate

Inchi: InChI=1S/C4H6S4/c1-7-3(5)4(6)8-2/h1-2H3
InchiKey: JPEQRYNXCNLOAJ-UHFFFAOYSA-N
Formula: C4H6S4
SMILES: CSC(=S)C(=S)SC
Mol. weight [g/mol]: 182.35
CAS: 61485-47-0

Physical Properties

Property code	Value	Unit	Source
gf	283.16	kJ/mol	Joback Method
hf	250.85	kJ/mol	Joback Method
hfus	23.58	kJ/mol	Joback Method
hvap	51.59	kJ/mol	Joback Method
ie	8.20	eV	NIST Webbook
log10ws	-2.97		Crippen Method
logp	2.367		Crippen Method
mcvol	124.020	ml/mol	McGowan Method
pc	5220.69	kPa	Joback Method
tb	568.56	K	Joback Method
tc	848.74	K	Joback Method
tf	272.18	K	Joback Method
vc	0.440	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	219.60	J/mol×K	568.56	Joback Method
cpg	226.93	J/mol×K	615.26	Joback Method
cpg	233.48	J/mol×K	661.95	Joback Method
cpg	239.37	J/mol×K	708.65	Joback Method
cpg	244.73	J/mol×K	755.35	Joback Method
cpg	249.66	J/mol×K	802.04	Joback Method
cpg	254.30	J/mol×K	848.74	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C61485470&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume